

IPW

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/758710-Conf. #6546
	Filing Date	January 16, 2004
	First Named Inventor	Martin W. Rupich
	Art Unit	1762
	Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	Attorney Docket Number	0002802.00174US1

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): PTO Form SB-08 42 Publications Postcard
<div>Remarks</div>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	WILMER CUTLER PICKERING HALE AND DORR LLP		
Signature			
Printed name	Mary Rose Scozzafava		
Date	March 30, 2006	Reg. No.	36,268

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
Dated: March 30, 2006	Signature: (Tina M. Dougal)



I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: March 30, 2006

Signature:

Tina M. Dougal
(Tina M. Dougal)

Docket No.: 0002802.00174US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Martin W. Rupich et al.

Application No.: 10/758710

Confirmation No.: 6546

Filed: January 16, 2004

Art Unit: 1762

For: OXIDE FILMS WITH NANODOT FLUX
PINNING CENTERS

Examiner: Not Yet Assigned

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT (IDS)

Dear Sir:

This Information Disclosure Statement is being filed prior to the mailing date of a first Office Action on the merits. No fee is required.

Applicants request that the Examiner initial and return a copy of the enclosed Form PTO SB-08 with the next communication.

Dated: March 30, 2006

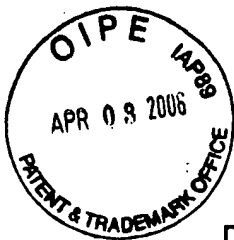
Respectfully submitted,

By *Mary Rose Scozzafava*
Mary Rose Scozzafava

Registration No.: 36,268

WILMER CUTLER PICKERING HALE AND
DORR LLP

60 State Street
Boston, Massachusetts 02109
(617) 526-6000
Attorney for Applicant



PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/758710-Conf. #6546	
			Filing Date	January 16, 2004	
			First Named Inventor	Martin W. Rupich	
			Art Unit	1762	
			Examiner Name	Not Yet Assigned	
Sheet	1	of	3	Attorney Docket Number	0002802.00174US1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA*	US-2002/0056401-A1	05-16-2002	Rupich et al.	
	AB	US-2002/178999-A1	12-05-2002	Beach et al.	
	AC*	US-2005/0065035-A1	03-24-2005	Rupich et al.	
	AD*	US-5,231,074	07-27-1993	Cima et al.	
	AE*	US-5,627,140-A	05-06-1997	Fossheim et al.	
	AF*	US-5,683,967	11-04-1997	Frenkel	
	AG*	US-5,897,945-A	04-27-1999	Lieber et al.	
	AH*	US-6,022,832	02-08-2000	Fritzemeier et al.	
	AI*	US-6,027,564	02-22-2000	Fritzemeier et al.	
	AJ*	US-6,077,344	06-20-2000	Schoup et al.	
	AK*	US-6,190,752	02-20-2001	Do et al.	
	AL*	US-6,258,754	06-10-2001	Sengupta	
	AM*	US-6,399,154	06-04-2002	Williams et al.	
	AN*	US-6,436,317	08-20-2002	Malozemoff et al.	
	AO*	US-6,440,211-B1	08-27-2002	Beach et al.	
	AP*	US-6,493,411	12-10-2002	Chu et al.	
	AQ*	US-6,510,604	01-28-2003	Pourrahimi	
	AR*	US-6,525,002	02-25-2003	Weinstein	
	AS*	US-6,562,761	05-13-2003	Fritzemeier et al.	
	AT*	US-6,569,811	05-27-2003	Shi	
	AU*	US-6,586,042-B2	07-01-2003	Araki et al.	
	AV*	US-6,602,588	08-05-2003	Kwon et al.	
	AW*	US-6,617,284	09-09-2003	Rokhvarger et al.	
	AX*	US-6,624,122-B1	09-23-2003	Holesinger et al.	
	AY*	US-6,669,774	12-30-2003	Zhang et al.	
	AZ*	US-6,673,387	01-06-2004	Zhang et al.	
	AA1*	US-6,676,811-B1	01-13-2004	Barnes et al.	
	AB1*	US-6,765,151	07-20-2004	Fritzemeier et al.	
	AC1*	US-6,797,313	09-28-2004	Fritzemeier et al.	
	AD1*	US-6,893,732-B1	05-17-2005	Fritzemeier et al.	
	AE1*	US-6,974,501-B1	12-13-2005	Zhang et al.	
	AF1	US-60/309,116	07-31-2001	Fritzemeier et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	BA	WO-00/058530	10-05-2000	American Superconductor Corporation		
	BB	WO-00/58044	10-05-2000	American Superconductor Corporation		
	BC	WO-01/08169	02-01-2001	American Superconductor Corporation		
	BD	WO-01/08170	02-01-2001	American Superconductor Corporation		
Examiner Signature				Date Considered		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/758710-Conf. #6546
				Filing Date	January 16, 2004
				First Named Inventor	Martin W. Rupich
				Art Unit	1762
				Examiner Name	Not Yet Assigned
Sheet	2	of	3	Attorney Docket Number	0002802.00174US1

	BE	WO-01/08231	02-01-2001	American Superconductor Corporation		
	BF	WO-01/08232	02-01-2001	American Superconductor Corporation		
	BG	WO-01/08233	02-01-2001	American Superconductor Corporation		
	BH	WO-01/08235	02-01-2001	American Superconductor Corporation		
	BI	WO-01/08236	02-01-2001	American Superconductor Corporation		
	BJ	WO-01/11428	02-15-2001	American Superconductor Corporation		
	BK	WO-01/15245	03-01-2001	Electric Power Research Institute et al.		
	BL	WO-01/26164	04-12-2001	American Superconductor Corporation		
	BM	WO-01/26165	04-12-2001	American Superconductor Corporation		
	BN	WO-02/35615	05-02-2002	American Superconductor Corporation		
	BO	WO-98/58415	12-23-1998	Massachusetts Institute of Technology		
	BP	WO-99/16941	04-08-1999	American Superconductor Corporation		
	BQ	WO-99/17307	04-08-1999	American Superconductor Corporation		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	CA	Ashworth, et al., "AC Losses in Silver Clad T _c Superconducting Tapes," Chinese Journal of Physics, 1996, Vol. 34(2-11), pp. 232-242.		
	CB	Babu, et al., "New Chemically Stable, Nano-Size Artificial Flux Pinning Centres in (RE)-Ba-Cu-O Superconductors," Superconductor Sci. and Tech., 2003, Vol. 16, L44-L45.		
	CC	Beach, et al., "Sol-Gel Synthesis of Rare Earth Aluminate Films as Buffer Layers for High T _c Superconducting Films," Mat. Res. Soc. Symp. Proc., 1998, Vol. 495, pp. 263-270.		
	CD	Carr, et al., "Filamentary YBCO Conductors for AC Applications," I.E.E.E. Transactions on Applied Superconductivity, 1999, Vol. 9(2), pp. 1475-1478.		
	CE	Chevtchenko et al., "Proposal to Convert a Second-Generation High Temperature Superconducting DC tape into an AC Tape," 6 pp.		
	CF	di Uccio et al., "Phase Competition Between Y ₂ BaCuO ₅ and Y ₂ O ₃ Precipitates in Y-rich YBCO Thin Films," Physica C, 1999, Vol. 321, pp. 162-176.		
Examiner Signature		Date Considered		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/758710-Conf. #6546
				Filing Date	January 16, 2004
				First Named Inventor	Martin W. Rupich
				Art Unit	1762
				Examiner Name	Not Yet Assigned
Sheet	3	of	3	Attorney Docket Number	0002802.00174US1

CG	Gammel et al., "Observation of Hexagonally Correlated Flux Quanta in YBa ₂ Cu ₃ O ₇ , Phys. Rev. Lett., 1987, Vol. 59(22), pp. 2592-2595.	
CH	Glowacki, et al., "A New Method for Decreasing Transport AC Losses in Multifilamentary Coated Superconductors," Physica C, 2001, Vol. 357-360., pp. 1213-1217.	
CI	Haugan et al., "Island Growth of Y ₂ BaCuO ₅ Nanoparticles in (211~1.5nm/123 ~10nm) x N Composite Multilayer Structures to Enhance Flux Pinning of YBa ₂ Cu ₃ O _{7-δ} Films," J. Mater. Res., 2003, Vol. 18(11), pp. 2618-2623.	
CJ	Huang, "Oxide Barriers and Their Effect on AC Losses of Bi,Pb (2223) Multifilamentary Tapes," 1998, Applied Superconductivity Conference.	
CK	Jin et al., "Superconducting Properties of YBa ₂ Cu ₃ O _{7-δ} with Partial Rare Earth Substitution," Physica C, 1991, Vol. 173, pp. 75-79.	
CL	Kehl, "The Principles of Metallographic Laboratory Practice," Third Edition, 1949, McGraw-Hill Book Company.	
CM	Lee et al., "Alternative Buffer Architectures for High Critical Current Density YBCO Superconducting Deposits on Rolling Assisted Biaxially-Textured Substrates," Jpn. J. Appl. Phys., 1999, Vol. 38, pp. L178-L180.	
CN	MacManus-Driscoll et al., "Strongly Enhanced Current Densities in Superconducting Coated Conductors of BaZrO ₃ -Doped YBa ₂ Cu ₃ O _{7-x} ," Superconductivity Tech. Center, Los Alamos Nat'l Lab., pp. 1-7.	
CO	Majoros, et al., "Modelling of the Influence of Magnetic Screening on Minimisation of Transport AC Losses in Multifilamentary Superconductors," I.E.E.E. Transactions on Applied Superconductivity, 2001, Vol. 1(1), pp. 2780-2783.	
CP	Malozemoff, "Second Generation HTS Wire: An Assessment," 2004, American Superconductor Brochure.	
CQ	Morrell et al., "Sol-Gel Synthesis of Epitaxial Films of (Sr, Ba) Bi ₂ (Nb,Ta) ₂ O ₉ and Bi ₄ Ti ₃ O ₁₂ on [100] SrTiO ₃ , Mat. Res. Soc. Symp. Proc., 1998, Vol. 495, pp. 271-276.	
CR	Oberly, et al., "AC Loss Analysis for Superconducting Generator Armatures Wound with Subdivided Y-Ba-Cu-O Coated Tape," Cryogenics, 2001, Vol. 41, pp. 117-124.	
CS	Oomen, et al., "AC Loss in High-Temperature Superconducting Conductors, Cables, and Windings for Power Devices," Superconductor Science and Technology, 2004, Vol. 17, pp. S394-S399.	
CT	Paranthaman et al., "Growth of Biaxially Textured RE ₂ O ₃ Buffer Layers on Rolled-Ni Substrates Using Reactive Evaporation for HTS-Coated Conductors," Superconductor Sci. Tech., 1999, Vol. 12, pp. 319-325.	
CU	Rupich et al., "Growth and Characterization of Oxide Buffer Layers for YBCO Coated Conductors," I.E.E.E. Trans. on Appl. Supercon., 1999, Vol. 9(2), pp. 1527-1530.	
CV	Shoup et al., "Epitaxial Thin Film Growth of Lanthanum and Neodymium Aluminate Films on Roll-Textured Nickel Using a Sol-Gel Method," J. Am. Cer. Soc., 1998, Vol. 81, pp. 3019-3021.	
CW	Skakle "Crystal Chemical Substitutions and Doping of YBa ₂ Cu ₃ O _x and Related Superconductors," Materials Science and Engineering, 1998, Vol. R23, pp. 1-40.	
CX	Wolf, et al., "Silicon Processing for the VLSI Era," 1986, Vol. 1, pp. 539-574, Lattice Press, Sunset Park, CA.	
CY	Wu, et al., "Twin Boundaries and Critical Current Densities of YBa ₂ Cu ₃ O ₇ Thick Films Fabricated by the BaF ₂ Process," Superconductor Sci. and Tech., 2003, Vol. 16, pp. 1127-1133.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner Signature	Date Considered
--------------------	-----------------